(54) Title: METHOD FOR TESTING THE ERROR RATIO BER OF A DEVICE ACCORDING TO CONFIDENCE LEVEL, TEST TIME AND SELECTIVITY
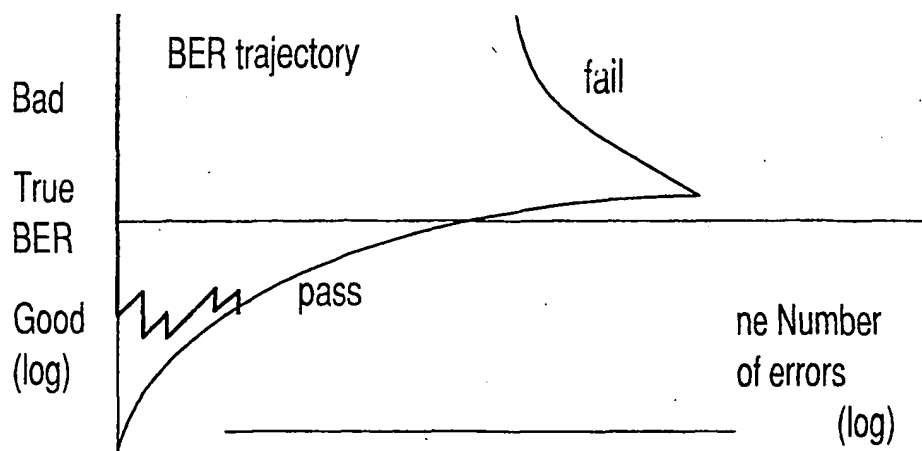
(57) Abstract: A method for testing the error ratio BER of a device under test against a specified allowable error ratio comprises the steps: measuring ns samples of the output of the device, thereby detecting ne erroneous samples of these ns samples, defining $BER(ne) = ne/ns$ as the preliminary error ratio and deciding to pass the device, if the preliminary error ratio $BER(ne)$ is smaller than an early pass limit EPL (ne). The early pass limit is constructed by using an empirically or analytically derived distribution for a specific number of devices each having the specified allowable error ratio by separating a specific portion DD of the best devices from the distribution for a specific number of erroneous samples ne and proceeding further with the remaining part of the distribution for an incremented number of erroneous samples.